

REMARKS

Claims 21 through 40 are pending in the application. Claim 21 is an independent claim with claims 25, 26, 27, 29, 30, and 31 depending therefrom. Claim 32 is an independent claim with claims 33, 34, 37, and 40 depending therefrom. Claims 22, 23, 24, 28, 35, 36, 38, and 39 have been allowed.

Claims 21, 25-27, 29-32, and 40 stand rejected as anticipated under § 102(b) in view of the DE '705 reference. Claims 33, 34, and 37 stand rejected under § 103(a) as obvious in view of the DE '705 reference and Feisel '020.

Applicant respectfully submits that independent claims 21 and 32 patentably distinguish over the DE '705 reference, and reconsideration of the rejection is respectfully requested.

Independent claim 21 calls for the use of a grooved roller to grind connection surfaces into the prefabricated concrete plate. Claim 21 expressly calls for the grooved roller to have a cross-sectional profile that corresponds to (i.e., matches) the shape of the connection surfaces such that the cross-sectional profile of the connection surfaces are defined by the grooved roller to a desired predetermined dimension. Similarly, the device of claim 32 calls for the grooved roller to have a cross-sectional profile and dimensions corresponding to the profile and desired dimensions of the connection surfaces. These characteristics and features are not present in the device or method according to the DE '705 reference, as discussed below.

As previously submitted, according to the DE '705 reference, the “grooves” defined in the concrete structure serve to receive elastically deformable profile elements, which in turn receive the rails. The elastically deformable elements

compensate for relatively imprecise production of the grooves that are defined in the concrete plate. Because of the elastically deformable nature of these elements, the grooves according to the DE '705 reference have a particular configuration that includes "undercut" portions. For example, referring to Figs. 1 through 4, the undercut portions of the groove are designated by reference numeral 3. Referring to pages 12 and 13 of the translation of the DE '705 reference, the following is stated:

In the groove 1, an elastically deformable profile element 5 is used that has a rail groove 6 running in longitudinal direction, into which a track rail 7 is inserted for forming a ballastless superstructure 8. The track rail 7 has a rail foot 9 designed as a push-in foot that is connected with a rail head 11 by way of a rail rib 10 that has a reduced cross section. With track rail 7 inserted, ***the push-in foot 9 is located essentially in the area of undercut sections 3 arranged in the closed end of groove 1, so that the profile element 5 is tensioned by the push-in foot 9 in the area of the undercut sections 3 of the groove 1, whereby both the track rail 7, as well as the profile element 5, is held in the groove 1.***

Thus, the undercut sections 3 are important to the groove structure in that they allow for elastic deformation of the profile element 5 into the undercut sections, which serves to secure the element 5 and track rail 7 relative to the groove 1. However, because the sections 3 are "undercut" relative to the profile of the groove, they must be defined in a subsequent cutting or grinding operation, as specifically illustrated in Figs. 2 through 5 of the reference. For example, referring to Fig. 2, the sections 2 of the groove 1 are first formed in the concrete slab 4. Then, the undercut sections 3 are formed by means of a slanted milling or cutting disk 12. In the embodiment of Fig. 4, after formation of the non-undercut sections 2, the undercut sections 3 are milled out by a separate device 20 that has a finger-like milling tool 21 that rotates about an axis to define the circular undercut section 3. Figs. 5 and 6 are schematic illustrations depicting the use of a first device to define the non-undercut sections of the groove, and

a second device to define the undercut sections. In all of the disclosed embodiments, the cross-sectional profile of the groove includes undercut sections which serve to secure the deformable elastic profile element within the groove.

Thus, even if the profile elements 5 of the DE '705 reference are considered as "add-on elements that are placed into the grooves", the connection surfaces within the groove for such elements are not formed by a grooved roller having a cross-sectional profile that matches the overall cross-sectional profile of the connection surfaces. With the groove profiles according to the DE '705 reference, the undercut sections must be formed in a separate cutting or milling operation by a separate cutting or milling tool. A grooved roller may arguably be used to define the non-undercut sections 2 of the groove. However, these sections do not correspond to the overall complete connection surfaces for the profile element 5. The remaining connection surfaces for the profile element 5 are defined by the undercut sections 3 that must be subsequently defined in the groove. The complete overall profile of the groove is not defined by a grooved roller having a cross-sectional profile that corresponds to the shape of the connection surfaces, as called for in claims 21 and 32 of the present application.


Accordingly, applicant respectfully submits that independent claims 21 and 32 patentably distinguish over the German '705 reference and are not allowable. Reconsideration of the final rejection is respectfully requested. The remaining claims are allowable for at least the reasons their respective independent claims are allowable.

It is respectfully submitted that all pending claims are allowable and that the application is in condition for allowance. Favorable action thereon is respectfully requested. The Examiner is encouraged to contact the undersigned at her convenience

should she have any questions regarding this matter or require any additional information.

Respectfully submitted,

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